Appendix A

Cinergy Bullard Project
Facilities Study Plan

Facilities Study Plan

Cinergy Solutions, Inc.

Bullard Energy Center

REVISION 2

Pacific Gas and Electric Company

WE DELIVER ENERGY.

December 1, 2005

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1. Introduction

Cinergy Solutions, Inc. (Cinergy) proposes to interconnect a new 200 MW generating facility to Pacific Gas & Electric's (PG&E's) Herndon-Kearney 230 kV line in Fresno, California. The project is called the Bullard Energy Center Project (Project). The commercial operational date of the Project is June 1, 2008..PG&E issued a System Impact Study (SIS) for the Project on May 17, 2005 that provided an analysis of the system impacts.

Per California Independent System Operator Corporation (CAISO) Amendment 39 Process and based on the issued SIS, the Facilities Study (FS) will provide:

1. Cost estimates and work scope for the Direct Assignment Interconnection Facilities necessary to interconnect the Project to PG&E's grid.

2. Cost estimates and work scope for the Network Upgrades necessary to mitigate the impact of the Project under various system conditions.

This FS Plan will form the basis for the Facilities Study Agreement (FSA) by defining the scope, content, assumptions, and terms of reference of the FS.

2. Study Fee

PG&E has estimated a study fee of $35,000 for performing the FS. The final cost to complete the FS will be based on actual cost.

PG&E will provide Cinergy a record of actual costs for performing the FS roughly two months after the study is completed. PG&E will bill Cinergy the remaining balance if the actual cost is higher than the estimated $35,000. If the actual cost is less than the estimated study fee, PG&E will refund the balance to Cinergy.

3. Schedule

Table 3-1 shows the tentative milestones/schedules associated with this FS.

Task	Milestone Description	Target Date
1	Establish study commencement date based on receipt of study fee with the FSA	November 4, 2005
2	Issue Facilities Study Report	January 27, 2005

Table 3-1: Study Schedule

Because of the complexity of this study, the FS will require more than 60 calendar days to complete.

Per the CAISO Tariff, Cinergy must execute and return the attached FSA along with the study deposit of $35,000 by the tenth business day from the tendering of this study plan. If Cinergy fails to return an executed FSA with the estimated study fee by the tenth business day, the Project will be removed from the CAISO Interconnection Application Queue.

4. Cost Estimates

All costs provided will be estimates only. Charges for implementing the interconnection of the Project will be made based upon the actual costs incurred.

4.1 Direct Assignment Interconnection Costs

A cost estimate will be provided based upon a commercial operation date in June 1, 2008. This cost estimate will include any substation and transmission line facilities required to interconnect the Project. The estimate will not include any facilities constructed, owned, and operated by Cinergy.

4.2 Network Upgrades Costs

A cost estimate will also be provided for any transmission facility additions or upgrades for mitigating any negative impacts on PG&E's existing facilities that are beyond the Interconnection Point.

5. Project and Interconnection Information

The Project consists of two gas turbine generators (GTG). Each GTG is rated 102.6 MW. The plant auxiliary load is 5.2 MW. The maximum net output to the grid will be 200 MW. Each generator will have a three-phase 13.8/230 kV step-up transformer. The Project will loop into PG&E's Herndon-Kearney 230 kV line via a new Bullard Switching Station. A conceptual one-line diagram of the Project is shown in Figure 2-1.

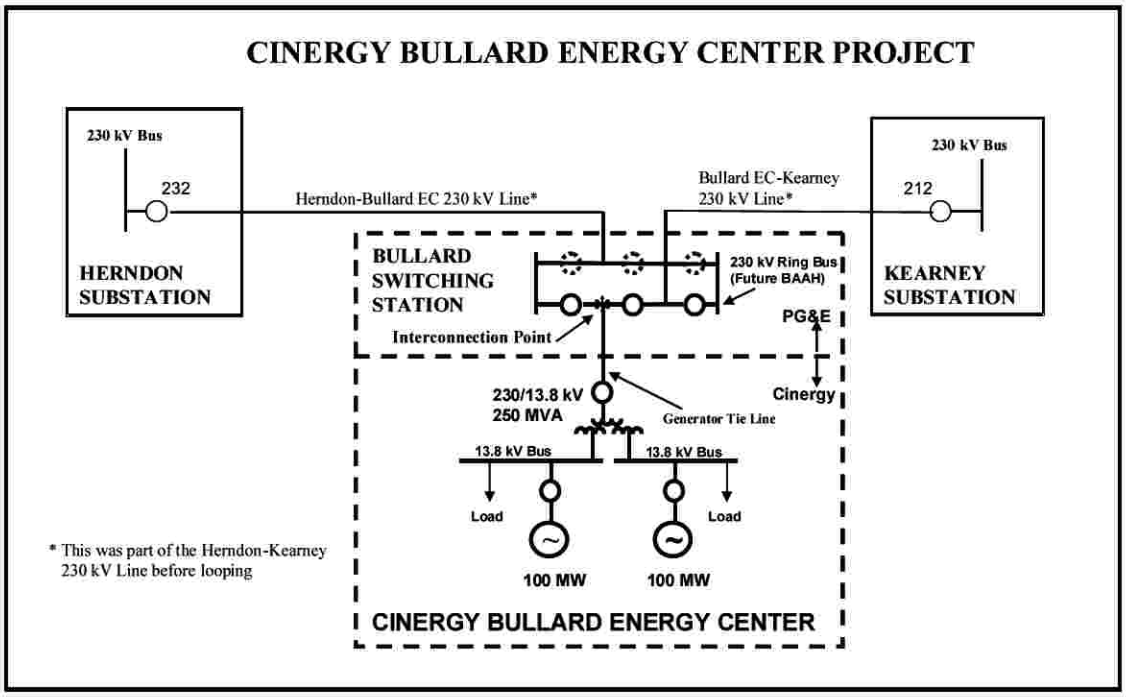

Figure 5-1: Conceptual One-Line Diagram

Figure 5-2 shows the approximate location of the Project and the transmission facilities in the area.

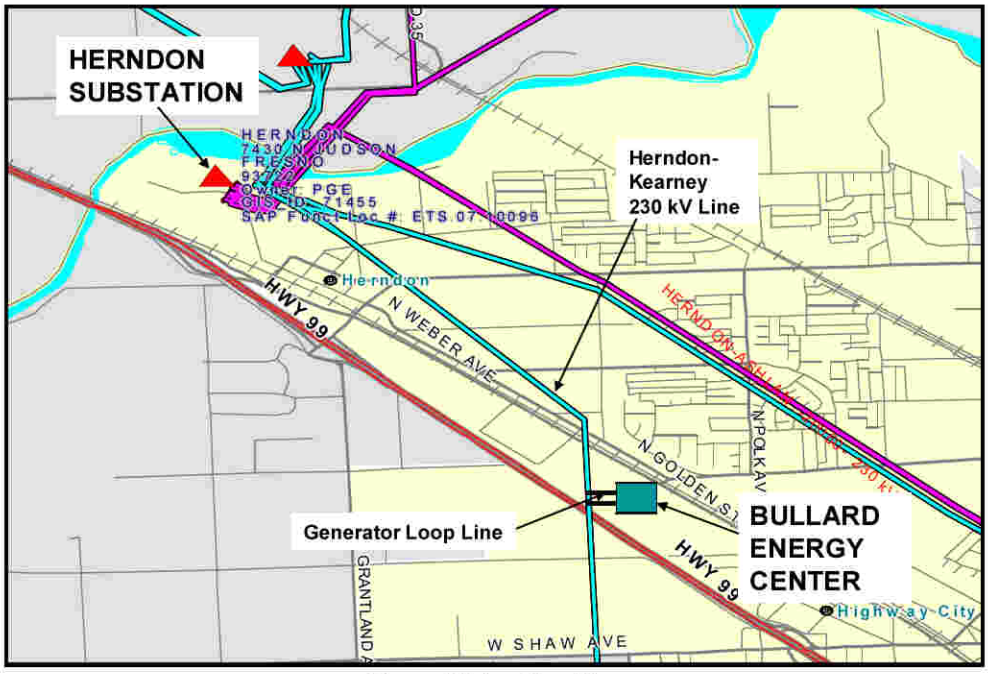

Figure 5-2: Location Map

6. Study Assumptions

PG&E will conduct the FS using the following assumptions:

1) The Project will consist of two gas turbine generators, each rated for 102.6 MW. The total plant load is 5.2 MW. The maximum net output to the grid is 200 MW.

2) The commercial operating date is June 1, 2008.

3) The Project has two step-up transformers. Each is a three phase, 13.8/230 kV transformer, rated 150/200/250 MVA (OA/FA/FA) with an impedance of 9% @ 150 MVA base.

4) Cinergy will engineer, procure, construct, own, and maintain its project facility including the new Bullard switching Station. The new Bullard Switching Station shall comply with PG&E standards. Cinergy will deed the new Bullard Switching Station to PG&E after its completion. PG&E will own and maintain the new Bullard Switching Station.

5) PG&E will provide the looping interconnection from the Herndon-Kearney 230 kV line to the new Bullard Switching Station.

Note: The issued SIS assumed that the project could be interconnected using a three breaker ring bus. This FS will determine the configuration that conforms to PG&E's existing standards for bus design. Any additional interconnection costs resulting from a new bus configuration will be the responsibility of the Project.

7. System Impact Study Results

The SIS issued on May 17, 2005 concluded that the Project would:

1) Cause one new normal overload to the Herndon-Bullard EC 230 kV line. The mitigation alternatives are either reducing generation net output to the grid from 200 MW to 152 MW or reconductor the Herndon-Bullard EC 230 kV line. Cinergy shall select the final mitigation plan when the project moves forward to the signing of a GSFA.

6) Cause four Category "B" emergency overloads and three of these four overloads will require mitigation by the Project: the Canandaigua and Glass section of the Glass-Biola 70 kV line, the Kingsburg-Corcoran No. 1 and 2 115 kV lines.

- The mitigation alternative for the Canandaigua and Glass section of the Glass-Biola 70 kV line is opening CB-12 at Biola Substation whenever the summer ratings are utilized.

- The mitigation alternative for the Kingsburg-Corcoran No. 1 and 2 115 kV lines consist of monitoring these lines via SCADA, and opening CB 142 at Corcoran at a pre-set flow limit on the Kingsburg-Corcoran 115 kV lines. PG&E has an unapproved project to install SCADA at Corcoran in 2006, and the FS will assume this SCADA project is in place

7) Aggravate four existing Category "C" emergency overloads and cause ten Category "C" emergency overloads. The mitigations are operation solution, generation output reduction, and installation of special protection schemes (SPS). The following two Category "C" emergency overloads will be mitigated by SPS:

- Los Banos-Westley 230 kV line overloads following the outage of the Herndon-Bullard EC and Gates-Gregg 230 kV lines

- Herndon-Figarden T1 section of the Herndon-Ashlan 230 kV line overloads following the outage of the Gregg-Herndon #1 and #2 230 kV lines

8) Require building of a new 230 kV switching station with a three breaker ring- bus with future expansion to a breaker and a half (BAAH) configuration

9) Be responsible for the replacement of four 115 kV breakers at Herndon Substation: CB 122, CB 132, CB 142, and CB 152

10) Cause no adverse transient performance impacts on the transmission system

11) Require a fully redundant, double-pilot current differential scheme utilizing dual fiber optic communications for the Herndon-Bullard EC 230kV Line and a two terminal carrier scheme for the Bullard EC-Kearney 230kV Line

8. Facilities Study Scope

The FS will provide the cost estimates and work scope for: (1) Direct Assignment Facilities required to interconnect the Project to the PG&E grid and (2) Network Upgrades to PG&E transmission facilities required to mitigate system impacts and interconnect the Project. The specific studies conducted by the FS are:

8.1 Transmission Line Evaluation

8.1.1 Direct Assignment

The generator tie line will be built and own by Cinergy. Therefore, no cost estimates or work scope will be provided in the FS.

8.1.2 Network Upgrades

Cost estimates and work scope will be provided for the looping interconnection from the Herndon-Kearney 230 kV line to the new Bullard Switching Station.

Based on the SIS study conclusion as indicted in Section 7, the transmission line evaluation will provide work scope and cost estimates for the reconductoring of the following lines:

- Herndon-Bullard Energy Center 230kV Line

In addition, the transmission line evaluation will provide work scope and cost estimates of two SPS for mitigating the Category "C" emergency overload as indicated in Section 7.

8.2 Substation Evaluation

8.2.1 Direct Assignment

The Project's new switching station will be built by Cinergy, therefore, no cost estimates or work scope will be provided in the FS for this substation. The substation shall incorporate the required relaying as specified in the PG&E interconnection handbook per Section G2.1. Note that there is a redundancy requirement for application of multifunction relays.

8.2.2 Network Upgrades

The substation evaluation will provide the work scope and cost estimates for the substation facilities beyond the Interconnection Point of the Project. This includes but is not limited to:

- The addition of the new Bullard Switching Station.
- Replacement of circuit breakers Nos. 122, 132, 142, and 152 at Herndon Substation.
- Installation of a fully redundant, double-pilot current differential scheme utilizing dual fiber optic communications for the Herndon – Bullard Energy Center 230kV Line.
- Installation of a two terminal carrier scheme for the Bullard Energy Center – Kearney 230kV Line.
- System protection equipment upgrades or additions at existing PG&E Substations.

8.3 Land Evaluation

8.3.1 Direct Assignment

PG&E's Corporate Real Estate Department will determine if any new land rights and/or easements are needed to install new facilities that might be required for the interconnection of the Project. The work scope and cost estimates will be provided for new land rights and permit requirements.

8.3.2 Network Upgrades

PG&E's Corporate Real Estate Department will determine the land rights for the new Bullard Switching Station and any other new land rights and/or easements, if any, that are needed to upgrade existing PG&E facilities that are negatively impacted by the Project. The work scope and cost estimates will be provided for new land rights and permit requirements.

9. Environmental Evaluation/ Permitting

9.1 CPUC General Order 131-D

PG&E is subject to the jurisdiction of the California Public Utilities Commission (CPUC); and must comply with CPUC General Order 131-D (Order) on the construction, modification, alteration, or addition of all electric transmission facilities (i.e., lines, substations, switchyards, etc.). This includes facilities to be constructed by others and deeded to PG&E. In most cases where PG&E's electric facilities are under 200 kV and are part of a larger project (i.e., electric generation plant), the Order exempts PG&E from obtaining an approval from the CPUC provided its planned facilities have been included in the larger project's California Environmental Quality Act (CEQA) review, the review has included circulation with the State Clearinghouse, and the project's lead agency (i.e., California Energy Commission) finds no significant unavoidable environmental impacts. PG&E or the project developer may proceed with construction once PG&E has filed notice with the CPUC and the public on the project's exempt status, and the public has had a chance to protest PG&E's claim of exemption. If PG&E facilities are not included in the larger project's CEQA review, or if the project does not qualify for the exemption, PG&E may need to seek approval from the CPUC (i.e., Certificate of Public Convenience and Necessity or Permit to Construct) taking as much as 18 months or more since the CPUC would need to conduct its own environmental evaluation (i.e., Negative Declaration or Environmental Impact Report).

PG&E recommends that the project proponent include PG&E facility work in its project description and application to the lead agency performing CEQA review on the project. The lead agency must consider the environmental impacts of the interconnection electric facility, whether built by the developer with the intent to transfer ownership to PG&E or to be built and owned by

PG&E directly, and make a finding of no significant unavoidable environmental impacts from construction of those facilities. Once the project has completed the review process and the environmental document (i.e., Negative Declaration or Environmental Impact Report) finds no significant unavoidable environmental impacts from PG&E's work, PG&E would file an Advice Letter with the CPUC and publish public notice of the proposed construction of the facilities. The noticing process takes about 90 days if no protests are filed, but should be done as early as possible so that a protest does not delay construction. PG&E has no control over the time it takes the CPUC to respond when issues arise. If the protest is granted, PG&E may then need to apply for a formal permit to construct the project (i.e., Certificate of Public Convenience and Necessity or Permit to Construct). Facilities built under this procedure must also be designed to include consideration of electric and magnetic field (EMF) mitigation measures pursuant to PG&E "EMF Design Guidelines of New Electrical Facilities: Transmission, Substation and Distribution".

Please see Section III, in General Order 131-D. This document can be found in the CPUC's web page at:

http://www.cpuc.ca.gov/PUBLISHED/GENERAL_ORDER/589.htm

9.2 CPUC Section 851

Because PG&E is subject to the jurisdiction of the CPUC, it must also comply with Public Utilities Code Section 851. Among other things, this code provision requires PG&E to obtain CPUC approval of leases and licenses to use PG&E property, including rights-of-way granted to third parties for interconnection facilities. Obtaining CPUC approval for a Section 851 application can take several months, and requires compliance with the California Environmental Quality Act (CEQA). PG&E recommends that Section 851 issues be identified as early as possible so that the necessary application can be prepared and processed.

10. Study Updates

This FS will be performed according to the assumptions shown in the Section titled "Study Assumptions." In the event that these assumptions are changed, an updating study may be required to re-evaluate the Project's impact on PG&E's transmission grid. Cinergy would be responsible for paying for any such updating study. Some of the changes that might prompt an update study are:

- Change on Queue position
- Modifications to a higher Queue project
- Change in the SIS or FS assumptions

11. Stand-by Power

This study does not address any requirements for stand-by power that the Project may require. Cinergy should contact their Generation Interconnection Services representative regarding this service.

Note: Cinergy is urged to contact their Generation Interconnection Services representative promptly regarding stand-by service in order to ensure its availability for the Project's start-up date.

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Facilities Study Agreement

Cinergy Solutions, Inc. (Applicant) has reviewed the Facility Study Plan for the interconnection of Applicant's Bullard Energy Center with PG&E's system in the City of Fresno, Fresno County and State of California and agrees with the proposed study plan.

Applicant agrees to pay the proposed study fee.

Dated this _____ day of _____, 2005

APPLICANT:

BY: _____
(Signature)

_____
(Type or Print Name)

TITLE: _____

MAILING ADDRESS:

_____

_____

_____